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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,395	07/02/2003	Taylor N. Van Vleet	ZNET.093A	3210

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EXAMINER
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BURGESS, BARBARA N

ART UNIT	PAPER NUMBER
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2157

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/612,395

Applicant(s)

VLEET ET AL.

Examiner

Barbara N. Burgess

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9-1-03, 4-26-04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. Claim 1 objected to because of the following informalities: "a web server...wherein the web server system includes one or more applications **the** generate" should instead read "a web server...wherein the web server system includes one or more applications **that** generate". Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-45 are rejected under 35 U.S.C. 102(e) as being anticipated by Pricer et al. (hereinafter "Pricer", US Patent Publication 2002/0143925 A1).

As per claim 1, Pricer discloses a web site system, comprising:

- A web server system that is responsive to requests from online users by generating and returning web pages, wherein the web server system includes one or more applications the generate personalized content for recognized users based on browse histories of such users (paragraphs [0003, 0007]);

- An event history server that persistently stores event data descriptive of events that occur during browsing sessions of each of a plurality of users of the web server system, and makes such event data available in real time to the one or more applications to facilitate personalization of web pages for the users (paragraph [0010]);
- Wherein the event history server implements a query interface through which the one or more applications can retrieve the event data of a given user by event type and by event time of occurrence (paragraphs [0013-0015]).

As per claim 2, Pricer discloses the web site system of Claim 1, wherein the event history server records the event data for a given event as an event object that includes at least the following: an event type identifier, an event value, a user ID, and a time stamp (paragraph [0008]).

As per claim 3, Pricer discloses the web site system of Claim 1, wherein the event history server includes at least one storage layer server that stores the event data persistently by user ID, and further includes at least one cache layer server that caches event data of online users (paragraph [0011]).

As per claim 4, Pricer discloses the web site system of Claim 2, wherein the cache layer server is configured to collect event data of an unrecognized user during a browsing session, and to pass such collected event data to the at least one storage

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layer server for persistent storage thereof if the unrecognized user becomes recognized during the browsing session (paragraph [0015]).

As per claim 5, Pricer discloses the web site system of Claim 1, wherein the event history sever comprises a plurality of cache layer servers, each of which is assigned to a different respective set of browse session ID's such that a given user remains assigned to a particular cache layer server throughout a browse session (paragraph [0008]).

As per claim 6, Pricer discloses the web site system of Claim 1, wherein the event history server comprises a plurality of minored storage layer servers that persistently store like event data by user ID (paragraphs [0010-0011]).

As per claim 7, Pricer discloses the web site system of Claim 1, wherein the query interface of the event history server supports queries of the form "has User X accessed URL Y?" (paragraph [0014]).

As per claim 8, Pricer discloses the web site system of Claim 1, wherein the query interface of the event history server supports queries of the form "when has User X accessed URL Y?" (paragraph [0012]).

As per claim 9, Pricer discloses the web site system of Claim 1, wherein the event history server records event data for substantially every mouse click action of every recognized user of a corresponding web site (paragraph [0001]).

As per claim 10, Pricer discloses the web site system of Claim 1, wherein the event history server records impression event data indicative of specific items presented to users on dynamically generated web pages (paragraph [[0016]).

As per claim 11, Pricer discloses the web site system of Claim 1, wherein the at least one application includes a web search application that provides functionality for searching an index of web pages, and uses the event history server to identify and highlight web search result items that have previously been accessed by a user conducting a current search (paragraph [0007]).

As per claim 12, Pricer discloses the web site system of Claim 1, wherein the at least one application includes an application that provides functionality for users to interactively view and organize their respective browse history data as recorded by the event history server (paragraphs [0010-0011]).

As per claim 13, Pricer discloses the web site system of Claim 1, wherein the event history server generates user-specific Bloom filters reflective of event histories of

specific users, and uses the user-specific Bloom filters to respond to queries from the at least one application (paragraph 0013)).

As per claim 14, Pricer discloses an event history server, comprising:

- a plurality of storage layer servers that persistently store, and provide real-time access to, event data descriptive of browsing events that occur during web browsing sessions of users, wherein the storage layer servers store the event data in an indexed form in association with corresponding user ms, and are implemented as mirrors of each other such that client requests for persistently stored event data can be serviced by any one of the storage layer servers (paragraphs [0010-0011]);
- a plurality of cache layer servers that serve as intermediaries between the storage layer servers and clients of the event history server, wherein each cache layer server stores cached event data within a respective cache and uses the cached event data to respond to queries from the clients (paragraphs [0014-0015]).

As per claim 15, Pricer discloses the event history server of Claim 14, wherein browsing sessions are uniquely assigned to specific cache layer servers such that each cache layer server caches event data for a different respective set of users (paragraph [0012]).

As per claim 16, Pricer discloses the event history server of Claim 14, wherein the cache layer servers are responsive to updates received from an event reporting

component b# updating their respective caches with event data specified by such updates, and by forwarding such updates to the storage layer servers for persistent storage of the event data specified therein (paragraph [0015]).

As per claim 17, Pricer discloses the event history server of Claim 14, wherein the storage layer servers store the event data for a given event as an event object that includes at least the following: an event type identifier, and event value, and a time stamp (paragraph [0008]).

As per claim 18, Pricer discloses the event history server of Claim 17, wherein the storage layer servers and the cache layer servers implement a query interface through which clients of the event history server can retrieve event objects based on at least the following criteria: user ID, event time, event date (paragraphs [0013-0014]).

As per claim 19, Pricer discloses the event history server of Claim 14, wherein each cache layer server is configured to collect event data of an unrecognized user during a browsing session, and to pass such collected event data to a storage layer server for persistent storage thereof if the unrecognized user becomes recognized during the browsing session (paragraph [0015]).



As per claim 20, Pricer discloses the event history server of Claim 14, wherein the cache layer servers support queries of the form "has User X accessed URL Y?" (paragraph [0014]).

As per claim 21, Pricer discloses the event history server of Claim 14, wherein the cache layer servers support queries of the form "when has User X accessed URL Y?" (paragraph [0012]).

As per claim 22, Pricer discloses the event history server of Claim 14, wherein the storage layer servers store event data for substantially every mouse click action of every recognized user corresponding web site ([0001]).

As per claim 23, Pricer discloses the event history server of Claim 14, wherein the storage layer servers record impression event data indicative of specific items presented to users on dynamically generated web pages (paragraph [0007]).

As per claim 24, Pricer discloses a method of processing a search query from a user, comprising, on a server system that is remote from the user:

- executing the search query to generate a query result, wherein the query result comprises URLs of web pages that are responsive to the search query (paragraphs [0014-0015]);
- for at least one of the URLs, querying a server to determine whether event data

stored for said user indicates that the user previously accessed the URL (paragraph [0015]);

- if the event data indicates that the user previously accessed the URL, including within a search results page an annotation indicating to the user that the URL was previously accessed (paragraphs [0015-0016]).

As per claim 25, Pricer discloses the method of Claim 24, wherein the annotation further indicates a date that the user accessed the URL, as indicated by the event data stored for the user (paragraph [0008]).

As per claim 26, Pricer discloses the method of Claim 24, wherein the server responds to the querying at least in part by using a Bloom filter stored for the user to evaluate whether the user previously accessed the URL (paragraph [0015]).

As per claim 27, Pricer discloses the method of Claim 24, wherein the method further comprises querying said server to identify a date that the user accessed the URL, and including said date within the search results page (paragraphs [0008, 0012]).

As per claim 28, Pricer discloses the method of Claim 24, wherein the method comprises querying the server separately for each of a plurality of said URLs to determine whether each such URL was previously accessed by the user, as indicated by the event data stored for the user (paragraph [0010]).

As per claim 29, Pricer discloses a search engine system comprising executable query processing code that embodies the method of Claim 24 (paragraph [0011]).

As per claim 30, Pricer discloses a system that provides functionality for conducting Internet searches, the system comprising:

- a search application that is responsive to search queries from users by generating and returning search results pages listing search result URLs of external web pages that are responsive to such search queries (paragraphs [0001-0002]);
- a server that records user-specific data indicative of the search result URLs selected by users during browsing of the search result pages (paragraph [0003]);
- wherein the search application accesses the server to determine whether specific search result URLs have previously been accessed by a user who is conducting a search, and incorporates into the search results pages indications of which search result URLs were previously accessed, whereby users are notified of search result URLs they have previously accessed (paragraphs [0010-0012]).

As per claim 31, Pricer discloses the system of Claim 30, wherein the server additionally records information indicative of the dates that specific search result URLs were accessed by specific users, and the search application uses said information to further indicate within the search results pages the dates that specific search result URLs were accessed (paragraph [0013]).

As per claim 32, Pricer discloses the system of Claim 30, wherein the server is configured to generate user-specific Bloom filters that reflect search result URLs selected by users, and to use said user-specific Bloom filters to evaluate whether specific users have previously accessed specific URLs (paragraph [0015]).

As per claim 33, Pricer discloses the system of Claim 30, wherein the system facilitates tracking of a user's selection of a search result URL by redirecting the user to the search result URL in response to selection thereof (paragraph [0014]).

As per claim 34, Pricer discloses the system of Claim 30, wherein the server further records user-specific data indicative of specific search queries submitted by specific users, and the search application uses the data stored by the server to identify and highlight search result URLs that did not come up when a user conducting a current search previously conducted the same search (paragraph [0012]).

As per claim 35, Pricer discloses the system of Claim 30, wherein the server persistently stores event data for each of a plurality of event types, and implements a query set that provides for real-time retrieval of user-specific event data by event type (paragraph 0015]).

As per claim 36, Pricer discloses a method of providing browse-history-based personalization of search results, the method comprising:

- maintaining event history data indicative of search result URLs selected by a user during browsing of search results pages (paragraphs [0009-0011]);
- generating a user-specific Bloom filter that reflects a plurality of the search result URLs selected by the user as indicated within said event history data (paragraphs [0012]);
- in response to an occurrence of a given URL within a result of a search query submitted by the user, determining whether the user previously accessed the given URL at least in part by analyzing the user-specific Bloom filter (paragraphs [0014-0016]);
- when the user is determined to have previously accessed the given URL, personalizing a search results page for the user with an indication that the user previously accessed the given URL (paragraph [0015]).

As per claim 37, Pricer discloses the method of claim 36, further comprising maintaining a record of when each such search result URL was selected by the user, and personalizing the search results each page with an indication of when the user accessed the given URL (paragraph [0010]).

As per claim 38, Pricer discloses the method of Claim 36, wherein the user-specific Bloom filter reflects accesses by the user to URLs of a plurality of independent web sites (paragraph [0013]).

As per claim 39, Pricer discloses the method of Claim 36, wherein the user-specific Bloom filter reflects actions performed by the user over multiple browsing sessions (paragraph [0001]).

As per claim 40, Pricer discloses the method of Claim 36, wherein the step of determining whether the user previously accessed the given URL comprises:

- initially determining whether the Bloom filter indicates a possible access by the user to the given URL (paragraph [0013]);
- when the Bloom filter indicates such a possible access, accessing said event history data to determine whether an access to the given URL is in fact reflected therein (paragraph [0014]).

As per claim 41, Pricer discloses the method of Claim 36, wherein the step of determining whether the user previously accessed the given URL comprises:

- initially determining whether the Bloom filter indicates a possible access by the user to the given URL (paragraph [0013]);
- when the Bloom filter indicates such a possible access, treating the given URLs

as having previously been accessed by the user, such that the user's event history data need not be directly accessed (paragraphs [0012, 0015]).

As per claim 42, Pricer discloses a method of providing browse-history-based content personalization, the method comprising:

- maintaining a browse history describing a user's interactions with a web site (paragraph [0001]);
- generating a user-specific Bloom filter that represents a plurality of events included within the user's browse history (paragraph [0013, 0015]);
- determining whether a particular event exists within the browse history of the user at least in-part by analyzing said Bloom filter (paragraphs [0012-0013]);
- personalizing a web page for the user such that the web page reflects whether the particular event exists within the browse history of the user (paragraph [0015]).

As per claim 43, Pricer discloses the method of Claim 42, wherein the Bloom filter reflects accesses by the user to search result URLs, and the step of determining whether a particular event exists within the browse history comprises using the Bloom filter to evaluate whether the user previously accessed a particular search result URL (paragraph [0013]).

As per claim 44, Pricer discloses the method of Claim 42, wherein the Bloom filter reflects a plurality of items selected by the user from an electronic catalog, and wherein

the step of determining whether a particular event exists within the browse history of the user comprises using the Bloom filter to evaluate whether the user previously selected a particular item from the electronic catalog (paragraphs [0009-0011]).

As per claim 45, Pricer discloses the method of Claim 42, wherein the Bloom filter reflects events in which an item was merely displayed to but not selected by the user, and wherein determining whether a particular event exists within the browse history of the user comprises using the Bloom filter to evaluate whether a particular item was previously displayed to the user (paragraph [0013]).

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 6,310,630 B1

US Patent 6,877,007 A1

US Patent Publication 2002/0198882 A1

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara N. Burgess whose telephone number is (571) 272-3996. The examiner can normally be reached on M-F (8:00am-4:00pm).

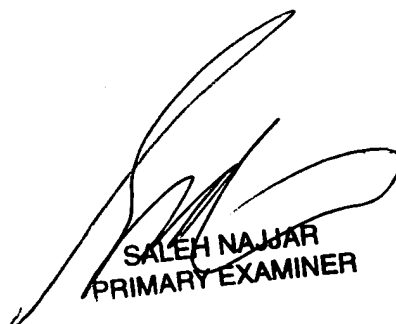
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Barbara N Burgess  
Examiner  
Art Unit 2157

June 12, 2005



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